

IN THE CLAIMS

- 1 1. A lock assembly for securing firearms against unauthorized access

comprising:

an elongated flexible cable having a free end adapted to be inserted into a barrel or chamber of a firearm and a second end which is not insertable through the barrel or chamber, the free end defining an annular groove;

a lock housing formed of an inner substantially rigid non-steel body encapsulated within a saw resistant shell, the shell being formed of hardened steel having a Rockwell hardness of about 30 or greater, the housing having a top and bottom wall and forming a cable receiving bore extending into the housing from the top wall along a longitudinal axis, a key lock cylinder cavity oriented parallel to the longitudinal axis and having a key access opening in the bottom wall;

a key lock cylinder mounted in the cavity and having a rotatable plug for receiving and turning through a predetermined angle from a first position to an unlocked position with a key; and

a locking member coupled to the cylinder plug and arranged for insertion into the cable free end annular groove to lock the free end into the housing, the cable free end being free to be removed from the housing in response to the rotation of the plug to the unlocked position.

- 1 2. The lock assembly of claim 1 wherein the shell comprises two cup-shaped sections, each section having a peripheral edge, the edges being secured together.
- 1 3. The lock assembly of claim 1 wherein the locking member is biased into the cable free end receiving bore and into the annular groove in the cable free end when inserted a predetermined distance into the bore.
- 1 4. The lock assembly of claim 1 wherein the first position of the rotatable plug is the locked position with the locking member inserted into the cable free end groove when the plug is in the locked position.
- 1 5. The lock assembly of claim 1 wherein the shell has a Rockwell C hardness of about 50 or greater.
- 1 6. The lock assembly of claim 1 wherein the shell has a thickness within the range of .020 to .100 inches .
- 1 7. The lock assembly of claim 1 wherein the plastic body is formed of ABS plus a fiber filler.
- 1 8. The lock assembly of claim 1 wherein the annular groove is defined by upper and lower cylindrical sections of substantially one diameter separated by an intermediate section of a reduced cross-sectional dimension so that the locking member extends into the intermediate section to secure the cable free end in the housing and locked position.
- 1 9. The lock assembly of claim 8 wherein the locking member is arranged to move laterally at a substantially right angle to the longitudinal axis.

1 10. The lock assembly of claim 9 wherein the lock cylinder is arranged so
that the key is removable only when the plug is turned to the locked position.

1 11. The lock assembly of claim 10 wherein the lower section of the cable free
end interferes with the movement of the locking member into the cable receiving bore
when the cable free end is inserted into the bore a distance less than the predetermined
distance to prevent removal of the key.

1 12. The lock assembly of claim 9 wherein the second end of the cable is
secured to the lock housing.

1 13. In a padlock housing for releasably securing a free end of a shackle, the
shackle having an indent on the free end thereof, the housing comprising:

5 an inner substantially rigid body encapsulated within a saw
resistant metal shell, the shell being formed of hardened steel having
a Rockwell C hardness of about 30 or greater and the body being
formed of a material having a hardness value less than that of
hardened steel shell, the body and shell having a top and bottom
wall, the body and shell forming a shackle free end receiving bore
extending into the housing from the top wall along a longitudinal axis
and a key lock cylinder cavity oriented parallel to the longitudinal
axis and having a key access opening in the bottom wall;

10 a key lock cylinder mounted in the cavity and having a
rotatable plug for receiving and turning through a predetermined
angle from a first position to a second unlocked position with a key;

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and

a locking member coupled to the cylinder plug for insertion into the shackle indent to lock the shackle free end into the housing, the shackle free end being free to be removed from the housing in response to the rotation of the plug to the unlocked position.

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14. The lock assembly padlock housing of claim 13 wherein the shell comprises two cup-shaped sections, each section having a peripheral edge, the edges being secured together.

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15. The padlock housing of claim 13 wherein the shackle includes a second end and the housing forms a second bore aligned parallel to the longitudinal axis for receiving the second end of the shackle.

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16. The padlock housing of claim 15 wherein the peripheral edge of the two cup-shaped shell sections are welded together.